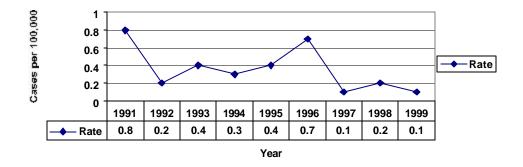
# **ROCKY MOUNTAIN SPOTTED FEVER**

Rocky Mountain spotted fever is a rickettsial disease caused by *Rickettsia rickettsii*. The disease is characterized by fever, headache, and myalgia, followed in three to five days by a maculopapular rash on the extremities that includes the soles of the feet and palms of the hands. The rash spreads to the rest of the body. Humans contract the disease most commonly from the bite of an infected tick or by contamination of the skin with tissue or feces from an infected tick. The tick must be attached for feeding for 4-6 hours. In Kentucky the American Dog Tick, *Dermacentor variabilis*, is the most common vector.

### **Laboratory Criteria for Confirmation:**

- Isolation of R. rickettsii from a clinical specimen (rarely performed), **OR**
- Demonstration of positive immunofluorescence in tissue biopsy, **OR**
- Fourfold or greater change in antibody titer to *R. rickettsii* antigen by immunofluorescent antibody (IFA), compliment fixation (CF), latex agglutination (LA), microagglutination (MA), or indirect hemagglutination (IHA) test in acute and convalescent specimens ideally taken three weeks or more apart, **OR**
- Positive polymerase chain reaction (PCR) assay to *R. rickettsii*.

# Rocky Mountain Spotted Fever Incidence Kentucky, 1991-1999



|                  | 1998 | 1999 |
|------------------|------|------|
| Number of Cases  | 6    | 3    |
| Rate per 100,000 | 0.2  | 0.1  |
| Rate by Gender   |      |      |
| Female           | 0.1  | 0.05 |
| Male             | 0.2  | 0.1  |

#### 1998

Three cases were in children 11 years and younger. The other 3 cases ranged in age from 31 to 51 years. Three of the cases occurred in the Purchase District, with one case each in Pennyrile, Barren River and the Bluegrass District.

#### 1999

One case was a 39 year old person and the other two cases were in their 70's. Two cases occurred in the Purchase District and one in the Bluegrass District. One case was fatal.

In 1998 there were 39 case reports received, with 6 reports meeting the case definition with proper laboratory confirmation. In 1999 there were 80 case reports received and only 3 were confirmed as cases. The most common reason cases were not confirmed was lack of the convalescent titer.